

Clapp, 227 U.S.P.Q. 972, 973 (Bd. Pat. App. & Inter. 1985).

“To establish prima facie obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. In re Royka, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). ‘All words in a claim must be considered in judging the patentability of that claim against the prior art.’ In re Wilson, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970).” MPEP § 2143.03.

The Examiner has the duty to present a prima facie obviousness rejection. The Examiner has not pointed to any teaching in Negishi that suggests a “color modulator comprised of a stack of at least two dielectric layers and at least three transparent electrodes, wherein a voltage applied to said electrodes limits the wavelengths of light permitted to continue on said light path” as recited by Claim 1.

The Examiner has stated, “The PML in turn is formed of light modulating substance by which light status can be changed according to the strength of electric field. See col. 2, lines 10-28.” The applicant respectfully submits the passage cited by the Examiner does not show, teach, or suggest “a “color modulator comprised of a stack of at least two dielectric layers and at least three transparent electrodes, wherein a voltage applied to said electrodes limits the wavelengths of light permitted to continue on said light path” as recited by Claim 1. To the contrary, the passage cited by the Examiner and shown in Figures 1 and 2 of Negishi expressly shows three light sources (REAr, REAg, REAb) each generating a primary color band. The PML modulates the light, but the Examiner has not pointed to any teaching in Negishi that shows, teaches, or suggests the PML “limits the wavelengths of light permitted to continue on said light path” based on a voltage applied to the electrodes.

The Examiner stated, “Furthermore, Negishi teaches about a signal processing circuit (2) outputting a control signal which in turn is related to a drive circuit that is responsible for color switching and selecting operations. See column 30, lines 14-23 and Fig. 36.” The applicant respectfully submits the Examiner has not addressed the limitations of Claim 1. The passage cited by the Examiner does not show, teach, or suggest “a color modulator . . . wherein a voltage applied to said electrodes limits the wavelengths of light permitted to continue on said light path” as recited by Claim 1. To the contrary, the passage cited by the Examiner teaches, as

summarized by Negishi in column 31, lines 26-30, "when the switch SW is turned on, the S-polarized light of red wave length band and the P-polarized light of blue wave length bend [sic] can be emitted. Further, when the switch SW is turned off, the S-polarized light of blue wave length band and the P-polarized light of red wave length band can be emitted." Thus, the voltage applied to the electrodes merely selects a polarization, not a wavelength.

The Examiner stated, "Negishi teaches a mixture of light to a substrate (BP2) side of the [spatial] light modulation element SLM beta through the color resolving filter Fdf. See column 44, lines 20-30 and Fig. 23-26." The applicant respectfully submits the passage cited by the Examiner does not address the limitations of Claim 1, and does not show, teach, or suggest "a color modulator . . . wherein a voltage applied to said electrodes limits the wavelengths of light permitted to continue on said light path" as recited by Claim 1. The color resolving filters referred to are dichroic filters that do not select wavelengths of light based on a voltage applied to the electrodes.

For the reasons given above, the Examiner has not met the burden of presenting a prima facie case of obviousness and the rejection of Claim 1 under 35 U.S.C. § 103(a) is defective and should be withdrawn.

Claims 2-6 depend from Claim 1 and should be deemed allowable for that reason and on their own merits. For the reasons argued above with respect to Claim 1, the Negishi fails to show, teach, or suggest the limitations of Claim 1, much less the limitations of Claim 1 in combination with the additional limitations of Claims 2-6.

Claim 7 was rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,486,878 to Negishi et al. (Negishi). The applicant respectfully disagrees and submits the Examiner has failed to present a prima facie case of obviousness under 35 U.S.C. § 103.

The Examiner has not pointed to any teaching in Negishi that suggests "voltages applied to said electrodes are operable to filter an incident white light beam into a light beam of one of three primary colors" as recited by Claim 7. The passage of Negishi cited by the Examiner only suggests selecting either a red beam or a blue beam.

The Examiner stated, "Furthermore, Negishi teaches about a signal processing circuit (2) outputting a control signal which in turn is related to a drive circuit that is responsible for color

switching and selecting operations. See column 30, lines 14-23 and Fig. 36.” The applicant respectfully submits the Examiner has not addressed the limitations of Claim 7. The passage cited by the Examiner does not show, teach, or suggest “alternating layers of electrodes and dielectric materials, wherein voltages applied to said electrodes are operable to filter an incident white light beam into a light beam of one of three primary colors” as recited by Claim 7. To the contrary, the passage cited by the Examiner teaches, as summarized by Negishi in column 31, lines 26-30, “when the switch SW is turned on, the S-polarized light of red wave length band and the P-polarized light of blue wave length bend [sic] can be emitted. Further, when the switch SW is turned off, the S-polarized light of blue wave length band and the P-polarized light of red wave length band can be emitted.” Thus, the voltage applied to the electrodes merely selects a polarization, not a wavelength.

The Examiner stated, “Negishi teaches a mixture of light to a substrate (BP2) side of the [spatial] light modulation element SLM beta through the color resolving filter Fdf. See column 44, lines 20-30 and Fig. 23-26.” The applicant respectfully submits the passage cited by the Examiner does not address the limitations of Claim 7, and does not show, teach, or suggest “alternating layers of electrodes and dielectric materials, wherein voltages applied to said electrodes are operable to filter an incident white light beam into a light beam of one of three primary colors” as recited by Claim 7. The color resolving filters referred to are dichroic filters that do not select wavelengths of light based on a voltage applied to the electrodes.

For the reasons given above, the Examiner has not met the burden of presenting a prima facie case of obviousness and the rejection of Claim 7 under 35 U.S.C. § 103(a) is defective and should be withdrawn.

Claims 8 and 9 depend from Claim 7 and should be deemed allowable for that reason and on their own merits. For the reasons argued above with respect to Claim 7, the Negishi fails to show, teach, or suggest the limitations of Claim 7, much less the limitations of Claim 7 in combination with the additional limitations of Claims 8 and 9.

Claim 10 was rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,486,878 to Negishi et al. (Negishi). The applicant respectfully disagrees and submits the Examiner has failed to present a prima facie case of obviousness under 35 U.S.C. § 103.

The Examiner has not pointed to any teaching in Negishi that suggests “altering electrical signals biasing said stack of dielectric layers such that said primary color beam of light alternates between three primary colors” as recited by Claim 10. The passage of Negishi cited by the Examiner only suggests selecting either a red beam or a blue beam.

The Examiner stated, “Furthermore, Negishi teaches about a signal processing circuit (2) outputting a control signal which in turn is related to a drive circuit that is responsible for color switching and selecting operations. See column 30, lines 14-23 and Fig. 36.” The applicant respectfully submits the Examiner has not addressed the limitations of Claim 10. The passage cited by the Examiner does not show, teach, or suggest “filtering said beam of white light to produce a primary color beam of light, said filtering step performed by passing said beam of white light through a stack of at least two dielectric layers, at least one of said dielectric layers exposed to an electric field . . . and altering electrical signals biasing said stack of dielectric layers such that said primary color beam of light alternates between three primary colors” as recited by Claim 10. To the contrary, the passage cited by the Examiner teaches, as summarized by Negishi in column 31, lines 26-30, “when the switch SW is turned on, the S-polarized light of red wave length band and the P-polarized light of blue wave length bend [sic] can be emitted. Further, when the switch SW is turned off, the S-polarized light of blue wave length band and the P-polarized light of red wave length band can be emitted.” Thus, the voltage applied to the electrodes merely selects a polarization, not a wavelength.


The Examiner stated, “Negishi teaches a mixture of light to a substrate (BP2) side of the [spatial] light modulation element SLM beta through the color resolving filter Fdf. See column 44, lines 20-30 and Fig. 23-26.” The applicant respectfully submits the passage cited by the Examiner does not address the limitations of Claim 10, and does not show, teach, or suggest “filtering said beam of white light to produce a primary color beam of light, said filtering step performed by passing said beam of white light through a stack of at least two dielectric layers, at least one of said dielectric layers exposed to an electric field . . . and altering electrical signals biasing said stack of dielectric layers such that said primary color beam of light alternates between three primary colors” as recited by Claim 10. The color resolving filters referred to are dichroic filters that do not select wavelengths of light based on a voltage applied to the

electrodes.

For the reasons given above, the Examiner has not met the burden of presenting a prima facie case of obviousness and the rejection of Claim 10 under 35 U.S.C. § 103(a) is defective and should be withdrawn.

In view of the remarks presented herewith, it is believed that the claims currently in the application, Claims 1-10, accord with the requirements of 35 U.S.C. § 112 and are allowable over the prior art of record. Therefore, it is urged that Claims 1-10 are in condition for allowance. Reconsideration of the present application is respectfully requested.

Respectfully submitted,



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